Response to Office Action of May 3, 2005 Attorney Docket No.: FSF-031431

U.S.Application No.: 10/633,253

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in

the application:

**Listing of Claims:** 

1-38. (canceled)

39. (previously presented) A photothermographic material comprising,

n one surface of a support, a photosensitive silver halide, a

non-photosensitive organic silver salt, a reducing agent for a silver ion, and a

binder, which are applied to the support using an organic solvent, wherein the

photosensitive silver halide has a silver iodide content of 40 % by mol to

100 % by mol, the photothermographic material further comprises a

compound having a β-lactam ring, and the compound having a β-lactam ring

is a penicillin or a cephalosporin.

40. (previously presented) The photothermographic material

according to claim 39, wherein the penicillin is represented by formula (2),

and the cephalosporin is represented by formula (3):

2

U.S.Application No.: 10/633,253

## Formula (2)

## Formula (3)

wherein in formulae (2) and (3),

 $L_{11}$  and  $L_{21}$  each independently represent an amino group or a substituted amino group;

 $L_{12}$  and  $L_{22}$  each independently represent a hydrogen atom, an alkaline metal ion, a quaternary ammonium ion, a hydrocarbon, or a heterocyclic residue; and

 $L_{23}$  represents a hydrogen atom, a halogen atom, an amino group, a hydroxyl group, a mercapto group, an alkyl group, an alkoxy group, an aryloxy group, an alkylthio group, an arylthio group, an acyloxy group, an acylthio group, a formyl group, or a heterocyclic residue.

41. (previously presented) The photothermographic material according to claim 40, wherein in formulae (2) and (3),

 $L_{11}$  and  $L_{21}$  each independently represent an amino group or an acylamino group;

 $L_{21}$  and  $L_{22}$  each independently represent a hydrogen atom, an alkaline metal ion, or an ammonium ion; and

L<sub>23</sub> represents a non-substituted or substituted alkyl group.

Attorney Docket No.: FSF-031431

Response to Office Action of May 3, 2005 U.S.Application No.: 10/633,253

- 42. (previously presented) A photothermographic material comprising, on one surface of a support, a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent for a silver ion, and a binder, which are applied to the support using an organic solvent, wherein the photosensitive silver halide has a silver iodide content of 40 % by mol to 100 % by mol, and the photothermographic material further comprises a compound having a β-lactam ring.
- 43. (previously presented) The photothermographic material according to claim 42, wherein an average grain diameter of the photosensitive silver halide is from 5 nm to 80 nm.
- 44. (previously presented) The photothermographic material according to claim 42, wherein a silver iodide content of the photosensitive silver halide is from 90% by mol to 100% by mol.
- 45. (previously presented) The photothermographic material according to claim 42 comprising, as the binder, polyvinyl butyral in an amount of 50% by weight to 100% by weight based on a total binder component in a photosensitive layer which is provided on the support.